



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------------------------------|----------------------|---------------------|------------------|
| 10/082,923 | 02/26/2002 | Yoshiki Yamauchi | 73620 | 4057 |
| 22242 | 7590 02/03/2004 | EXAMINER | | |
| | N TABIN AND FLAI LA SALLE STREET | KANG, JULIANA K | | |
| SUITE 1600 | CA SALLE STREET | ART UNIT | PAPER NUMBER | |
| CHICAGO, I | L 60603-3406 | | 2874 | |

DATE MAILED: 02/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| * * | | | Applicatio | n No. | Applicant(s) | | | | |
|--|--|-------------|--------------|---|-----------------|-----|--|--|--|
| | | | 10/082,92 | 3 | YAMAUCHI ET AL. | | | | |
| | Office Action Summary | <u> </u> | Examiner | | Art Unit | | | | |
| | | 1_ | Juliana K. I | | 2874 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | | | |
| Status | Responsive to communication(s) file | ed on | | | | | | | |
| | · | 2b)⊠ This a | • | n-final | | | | | |
| · · | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | | |
| Disposition of Claims | | | | | | | | | |
| 4)⊠ | ☑ Claim(s) <u>1-21</u> is/are pending in the application. | | | | | | | | |
| • | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | | |
| 6)⊠ 7)⊠ | 5)⊠ Claim(s) 1-10 and 12-15 is/are allowed. 6)⊠ Claim(s) 11 and 16 is/are rejected. 7)⊠ Claim(s) 17-21 is/are objected to. | | | | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | | | | |
| _ | on Papers | . = | | | | | | | |
| | The specification is objected to by the drawing(s) filed on 26 February | | | ented or h)□ objected | to by the Exami | ner | | | |
| 0/23 | 10)⊠ The drawing(s) filed on <u>26 February 2002</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | | |
| | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) The translation of the foreign language provisional application has been received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. | | | | | | | | | |
| Attachmen | | | | . 🗖 | | | | | |
| 2) Notic | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (F mation Disclosure Statement(s) (PTO-1449) P | | | 4) Interview Summary (5) Notice of Informal Pa 6) Other: | | | | | |

Application/Control Number: 10/082,923

Art Unit: 2874

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Inventorship

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claim Objections

3. Claims 7, 11 and 16-21 are objected to because of the following informalities:

Claim 11 recites the limitations "the facet" in line 26 and "said multiplexing area" in line 25. There are insufficient antecedent bases for these limitations in the claim.

Claim 16, recites the limitation "the same body" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claims 7 and 17-21 recites the limitations "an optimal multiplexing circuit" in lines 5 of each claim. Since "an optimal multiplexing circuit" is referring back to the optical

Art Unit: 2874

multiplexing that is recited in their preceding claims, it appears that claims should be amended to read, "the optical multiplexing circuit set forth in claim." Appropriate corrections are required.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 11 and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Li (U.S. Patent 6,301031).

Li discloses the claimed limitations including an optical multiplexer circuit (16), extracting means (34), check signal reintroducing means (40) for reintroducing the extracted check signal into the optical multiplexing circuit and check signal detecting means (18). Li does not teach the claimed location of the check signal detecting means which is located opposite side of where the check signal is reintroduced into the multiplexing circuit. Placing Li's check signal detecting means next to the multiplexing circuit would make the device more compact. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to place Li's check signal detecting means opposite to the side where the check signal is reintroduced into the multiplexing circuit to make the device compact, and since it has been held that

Application/Control Number: 10/082,923

Art Unit: 2874

rearranging parts of an invention involves only routine skill in the art. Li shows the multiplexing circuit (16) and the extracting means (34) integrated together.

Allowable Subject Matter

Page 4

6. Claims 1-10 and 12-15 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: Regarding claims 1 and 3, there is no prior art made of record that teaches the claimed optical multiplexing circuit with all the specific elements and the specific combinations including plural pairs of input monitoring channel waveguides which transmits the signal in a direction opposite to the input signal as set forth in claims 1 and

Regarding claim 3, there is no prior art of record that teaches or reasonably suggests the claimed optical multiplexing circuit with all the specific elements and the specific combinations including plural pairs of output monitoring channel waveguides as set forth in claim 3.

7. Claims 17-21 would be allowable if rewritten or amended to overcome the objections set forth in this Office action.

Conclusion

8. The prior art documents submitted by applicant have been considered and made of record (note the attached copy of form PTO-1449).

Application/Control Number: 10/082,923

Art Unit: 2874

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Koga et al (U.S. Patent 5,617,234) teach multi-wavelength

Page 5

simultaneous monitoring circuit employing arrayed waveguide grating.

10. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Juliana K. Kang whose telephone number is (571) 272-

2348. The examiner can normally be reached on Mondays and Thursdays 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Rod Bovernick can be reached on (571) 272-2344. The fax phone number

for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703) 308-

3072.

Juliana Kang

January 24, 2004